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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/625,510      | 07/25/2000  | Fumiaki Kamijo       | 040405/0323         | 7595             |

22428 7590 01/29/2003

FOLEY AND LARDNER  
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3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

GRIER, LAURA A

ART UNIT

PAPER NUMBER

2644

DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/625,510

Applicant(s)

KAMIJO, FUMIAKI

Examiner

Laura A Grier

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2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_



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Commissioner of Patents and Trademarks

## DETAILED ACTION

1. The corrected abstracted submitted in paper no. 5 has been accepted.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Odlen et al.

Regarding **claim 1**, the applicant's admitted prior art discloses a personal computer including an operating system with means of adjusting the sound volume of the computer system for multiple audio applications. However, the applicant's admitted prior art fails to specifically disclose a memory with software applications, and sound volume adjustment control means, thereof as claimed. The examiner maintains that such a memory and sound volume adjustment control means were well known in the art.

Regarding the memory and volume adjustment control means, Odlen et al. disclose a digital memory registers and other memory (ROM and RAM) for storing information and functions levels for various radio receiver functions including volume and other audio effects. The information is stored in regards to the various audio facets such as whether the audio is AM, FM, tape or phonograph type. As well, Odlen discloses a control means which may including a

microprocessor or a CPU for accessing the information from the memory for adjustment either manually or automatically, wherein the adjustments includes a change in volume, accordingly as needed based on the selected audio information received from memory, further the CPU and other functions in respect to changes of the audio parameter, and the memories of Odlen functions based a routine program stored therein, which is indicative of applicable software (col. 1, 40-68 – col. 2, lines 1-7; col. 3, lines 64-68 – col. 4, lines 1-5, 28-46, col. 6, lines 16-43, and figures 8-14.), which is indicative of audio information (volume information) for individual applications.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of the applicant's admitted prior art by implementing a parallel technique including such a memory and control means for making adjustments according the information received of various audio extremities (devices) taught by Odlen, for the purpose of lessening or alleviating the inconvenience of having to change the volume each time a different audio device and/or application is being used or activated.

4. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Odlen et al.

Regarding **claim 9**, the applicant's admitted prior art discloses a personal computer including an operating system with means of adjusting the sound volume of the computer system for multiple audio applications. However, the applicant's admitted prior art fails to specifically disclose a memory with software applications, and sound volume adjustment control means,

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thereof as claimed. The examiner maintains that such a memory and sound volume adjustment control means were well known in the art.

Regarding the memory and volume adjustment control means, Odlen et al. disclose a digital memory registers and other memory (ROM and RAM) for storing information and functions levels for various radio receiver functions including volume and other audio effects. The information is stored in regards to the various audio facets such as whether the audio is AM, FM, tape or phonograph type. As well, Odlen discloses a control means which may including a microprocessor or a CPU for accessing the information from the memory for adjustment either manually or automatically, wherein the adjustments includes a change in volume, accordingly as needed based on the selected audio information received from memory, further the CPU and other functions in respect to changes of the audio parameter, and the memories of Odlen functions based a routine program stored therein, which is indicative of applicable software (col. 1, 40-68 – col. 2, lines 1-7; col. 3, lines 64-68 – col. 4, lines 1-5, 28-46, col. 6, lines 16-43, and figures 8-14.), which is indicative of audio information (volume information) for individual applications.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of the applicant's admitted prior art by implementing a parallel technique including such a memory and control means for making adjustments according the information received of various audio extremities (devices) taught by Odlen, for the purpose of lessening or alleviating the inconvenience of having to change the volume each time a different audio device and/or application is being used or activated.

5. **Claims 2 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Odlen et al. (herein, Odlen) in view of Hetherington.

Regarding **claims 2 and 10**, Odlen discloses everything claimed as applied above (see claims 1 and 9, respectively). However, Odlen fails to specifically disclose a sound volume adjustment coefficient. The examiner maintains that such a coefficient was well known in the art.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10, and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

6. **Claims 3 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Odlen.

Regarding **claims 3 and 11**, Odlen discloses everything claimed as applied above (see claims 1 and 9, respectively). However, Odlen fails to specifically disclose the adjusting the volume to an equivalent level as that of the operating system. Adjusting the incoming volume of

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an audio application to equal that of the system in which the audio application is to be used is a common technique used in the art of optimizing the volume control of a personal computer system. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Odlen by implementing a such a common volume adjustment technique for enhancing and maintaining the volume control as desired of a computer system used for reproducing audio, wherein the volume level parallel to the capabilities of the computer system.

7. **Claims 4 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Odlen in view of Hetherington.

Regarding **claims 4 and 12**, Odlen discloses everything claimed as applied above (see claims 1 and 9, respectively). However, Odlen fails to specifically disclose a sound volume adjustment coefficient. The examiner maintains that such a coefficient was well known in the art.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10 and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by providing a logarithmic values (coefficients) as



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taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

However, Odlen and Hetherington fail to specifically disclose the adjusting the volume to an equivalent level as that of the operating system. Adjusting the incoming volume of an audio application to equal that of the system in which the audio application is to be used is a common technique used in the art of optimizing the volume control of a personal computer system. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Odlen by implementing a such a common volume adjustment technique for enhancing and maintaining the volume control as desired of a computer system used for reproducing audio, wherein the volume level parallel to the capabilities of the computer system.

8. **Claims 5 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Odlen.

Regarding **claims 5 and 13**, Odlen discloses everything claimed as applied above (see claims 1 and 9, respectively). Odlen et al. further discloses a display means for the changes the volume level as being adjusted to a desired level (col. 1, lines 54-68 and col. 2, lines 1-7).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by incorporating a display means for the purpose of enabling an operator to visualize and as well hear the changes in the volume level as they occur.

9. **Claims 6 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Odlen in view of Hetherington.

Regarding **claims 6 and 14**, Odlen discloses everything claimed as applied above (see claims 1 and 9, respectively). Odlen et al. further discloses a display means for the changes the volume level as being adjusted to a desired level (col. 1, lines 54-68 and col. 2, lines 1-7). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by incorporating a display means for the purpose of enabling an operator to visualize and as well hear the changes in the volume level as they occur. However, Odlen fails to specifically disclose a sound volume adjustment coefficient. The examiner maintains that such a coefficient was well known in the art.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10 and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

**10. Claims 7, 8, 15 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Odlen in view of Hetherington.

Regarding **claims 7, 8, 15 and 16**, Odlen discloses everything claimed as applied above (see claims 1 and 9, respectively). Odlen et al. further discloses a display means for the changes

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the volume level as being adjusted to a desired level (col. 1, lines 54-68 and col. 2, lines 1-7). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by incorporating a display means for the purpose of enabling an operator to visualize and as well hear the changes in the volume level as they occur. However, Odlen fails to specifically disclose a sound volume adjustment coefficient. The examiner maintains that such a coefficient was well known in the art.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10 and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

However, Odlen and Hetherington fail to specifically disclose the adjusting the volume to an equivalent level as that of the operating system. Adjusting the incoming volume of an audio application to equal that of the system in which the audio application is to use is a common technique used in the art of optimizing the volume control of a personal computer system. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Odlen by implementing a such a common volume adjustment

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technique for enhancing and maintaining the volume control as desired of a computer system used for reproducing audio, wherein the volume level parallel to the capabilities of the computer system.

11. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Odlen et al.

Regarding **claim 17**, the applicant's admitted prior art discloses a personal computer including an operating system with means of adjusting the sound volume of the computer system for multiple audio applications. However, the applicant's admitted prior art fails to specifically disclose a memory with software applications, and sound volume adjustment control means, thereof as claimed. The examiner maintains that such a memory and sound volume adjustment control means were well known in the art.

Regarding the memory and volume adjustment control means, Odlen et al. disclose a digital memory registers and other memory (ROM and RAM) for storing information and functions levels for various radio receiver functions including volume and other audio effects. The information is stored in regards to the various audio facets such as whether the audio is AM, FM, tape or phonograph type. As well, Odlen discloses a control means which may including a microprocessor or a CPU for accessing the information from the memory for adjustment either manually or automatically, wherein the adjustments includes a change in volume, accordingly as needed based on the selected audio information received from memory, further the CPU and other functions in respect to changes of the audio parameter, and the memories of Odlen functions based a routine program stored therein, which is indicative of applicable software (col.

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1, 40-68 – col. 2, lines 1-7; col. 3, lines 64-68 – col. 4, lines 1-5, 28-46, col. 6, lines 16-43, and figures 8-14.), which is indicative of audio information (volume information) for individual applications.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of the applicant's admitted prior art by implementing a parallel technique including such a memory and control means for making adjustments according the information received of various audio extremities (devices) taught by Odlen, for the purpose of lessening or alleviating the inconvenience of having to change the volume each time a different audio device and/or application is being used or activated.

**12. Claim 18** is rejected under 35 U.S.C. 103(a) as being unpatentable over Odlen in view of Hetherington.

Regarding **claim 18**, Odlen discloses everything claimed as applied above (see claim 17). However, Odlen fails to specifically disclose a sound volume adjustment coefficient. The examiner maintains that such a coefficient was well known in the art.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10 and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

13. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Odlen.

Regarding **claim 19**, Odlen discloses everything claimed as applied above (see claim 17). However, Odlen fails to specifically disclose the adjusting the volume to an equivalent level as that of the operating system. Adjusting the incoming volume of an audio application to equal that of the system in which the audio application is to used is a common technique used in the art of optimizing the volume control of a personal computer system. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Odlen by implementing a such a common volume adjustment technique for enhancing and maintaining the volume control as desired of a computer system used for reproducing audio, wherein the volume level parallel to the capabilities of the computer system.

14. **Claim 20** is rejected under 35 U.S.C. 103(a) as being unpatentable over Odlen in view of Hetherington.

Regarding **claim 20**, Odlen discloses everything claimed as applied above (see claim 17). However, Odlen fails to specifically disclose a sound volume adjustment coefficient. The examiner maintains that such a coefficient was well known in the art.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system.

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Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10 and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

However, Odlen and Hetherington fail to specifically disclose the adjusting the volume to an equivalent level as that of the operating system. Adjusting the incoming volume of an audio application to equal that of the system in which the audio application is to used is a common technique used in the art of optimizing the volume control of a personal computer system. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Odlen by implementing a such a common volume adjustment technique for enhancing and maintaining the volume control as desired of a computer system used for reproducing audio, wherein the volume level parallel to the capabilities of the computer system.

Regarding **claim 21**, Odlen discloses everything claimed as applied above (see claim 17). Odlen et al. further discloses a means for the changes the volume level as being adjusted to a desired level (col. 1, lines 54-68 and col. 2, lines 1-7).

15. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Odlen in view of Hetherington.

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Regarding **claim 22**, Odlen discloses everything claimed as applied above (see claim 17). Odlen et al. further discloses a means for the changes the volume level as being adjusted to a desired level (col. 1, lines 54-68 and col. 2, lines 1-7). However, Odlen fails to specifically disclose a sound volume adjustment coefficient. The examiner maintains that such a coefficient was well known in the art.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10 and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

**16. Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Odlen in view of Hetherington.

Regarding **claim 23**, Odlen discloses everything claimed as applied above (see claim 17). Odlen et al. further discloses a means for the changes the volume level as being adjusted to a desired level (col. 1, lines 54-68 and col. 2, lines 1-7). However, Odlen fails to specifically



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disclose a sound volume adjustment coefficient. The examiner maintains that such a coefficient was well known in the art.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10 and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Odlen by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

However, Odlen and Hetherington fail to specifically disclose the adjusting the volume to an equivalent level as that of the operating system. Adjusting the incoming volume of an audio application to equal that of the system in which the audio application is to used is a common technique used in the art of optimizing the volume control of a personal computer system. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Odlen by implementing a such a common volume adjustment technique for enhancing and maintaining the volume control as desired of a computer system used for reproducing audio, wherein the volume level parallel to the capabilities of the computer system.

***Response to Arguments***

17. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

In the arguments submitted by the applicant on 11/21/02, the applicant argued that the prior art of Odlen fails to disclose the aspects of the invention in respect to the use of software applications for controlling volume of a computer system. In respect to Odlen, the examiner agrees that Odlen is not a computer system however, the concepts and teachings of Odlen are parallel with the claim limitations, wherein, Odlen system does uses a microprocessor and/or a CPU, and as well, memory which stores a programs for controlling audio functions therein, which is indicative of software applications. In respect to the applicant's argument of the volume control algorithm, the use of such an algorithm in common practice and thus the prior art of Hetherington is maintained.

***Citation of Pertinent Art***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yumoto et al., U. S. Patent No. 6195438, disclose a method and apparatus for leveling and equalizing the audio output of an audio or audio-visual system.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

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**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG

January 23, 2003

  
FORESTER W. ISEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600